GOVERNMENT OF INDIA
NON-CONVENTIONAL ENERGY SOURCES
LOK SABHA

UNSTARRED QUESTION NO:3354
ANSWERED ON:16.03.2000
SOLAR ENERGY
BRIJBHUSHAN SHARAN SINGH

Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) the progress made so far in the field of solar energy and the steps being taken by the Government for this purpose;

(b) whether solar hand pumps and lamps are so costly that people are not able to take benefits of these even though financial aid is being given on them; and

(c) if so, the steps being taken / proposed to reduce the cost of solar hand pumps and lamps and provide additional subsidy on these items so as to make these within the access of people in rural areas?

Answer

MINISTER OF STATE FOR NON-CONVENTIONAL ENERGY SOURCES (INDEPENDENT CHARGE) (SHRI M. KANNAPPAN)

(a): Government has been implementing schemes for harnessing solar energy for diverse applications using the solar thermal and solar photovoltaic routes. The schemes are implemented through state nodal agencies and Indian Renewable Energy Development Agency (IREDA).The Indian programmes are among the largest of their kind in the world. The efforts made under these schemes have resulted in installation of about 4.80 lakh square metres of collector area for solar hot water systems, over 4.81 lakh box type solar cookers, 2.58 lakh solar lanterns, 1.06 lakh solar home lighting systems, 38,157 street lighting systems, 3,131 solar photovoltaic (PV) pumps, 885 kWp capacity PV power plants for decentralised applications and 1.04 MWp capacity of grid interactive PV power projects as on 31.12.1999. Sixteen Aditya Solar shops have been opened in major cities to make solar energy devices easily available and also to provide after sales service. A large number of villages in the backward regions of Rajasthan, West Bengal, UP, the North-East and the island territories are benefiting from the installation of solar devices. The world`s largest solar cooking system is functioning at Taleti, near Mount Abu in Rajasthan. In addition, the Government has recently approved establishment of a 140 MW integrated solar combined cycle power project at Mathania near Jodhpur in Rajasthan.

(b) & (c): The average prices of a typical 900 W solar PV pump, a solar lantern and a solar home lighting system are about Rs. 2,50,000/-, Rs. 4,000/- and Rs. 12,000/- respectively. During 1999-2000 the Government is providing subsidy at the rate of Rs. 125/W of PV array used with solar pumps for its deployment. In addition, soft loan at 5% interest rate is being provided up to 90% of the balance cost of the pumping system. The Government is also providing a fixed subsidy of Rs. 1,500/- for a solar lantern and Rs. 6,000/- or 50% of ex-works cost, whichever is less for installation of a solar home lighting system During 1999-2000, 36,401 solar lanterns, 14,923 solar home lighting systems, 2,834 street lighting systems, 273 solar PV pumps, 90 kWp capacity PV power plants for decentralised applications and 200 kWp capacity of grid interactive PV power projects have been installed as on 31.12.1999, under the schemes of the Ministry of Non-Conventional Energy Sources. At present there is no proposal under the consideration of the Government for increasing subsidy on solar pumps and lighting systems. In view of the high initial cost of PV systems, the Government is supporting efforts for reducing the cost of solar modules by sponsoring R&D projects for technological upgradation and also for improving the efficiency of PV systems. The costs of these systems are also expected to reduce with increase in the volume of production. A scheme to provide soft loans to manufacturing projects aimed at reducing the cost of PV devices has been launched recently.